

## CLAIMS:

1. A vehicle monitoring system comprising:
  - an on-vehicle unit provided in a vehicle, the on-vehicle unit comprising: a vehicle condition monitor for monitoring a condition of the vehicle and outputting vehicle condition data; and an on-vehicle communicator for sending the vehicle condition data output from the vehicle condition monitor;
  - a data server for communicating with the on-vehicle unit, the data server comprising a server communicator for receiving the vehicle condition data sent from the on-vehicle communicator;
  - a storage section for storing the vehicle condition data; and
  - an abnormality determining section for determining whether an abnormality has occurred in the vehicle, based on the vehicle condition data stored in the storage section, and for outputting an abnormality informing signal when the abnormality has occurred in the vehicle.
2. A vehicle monitoring system according to claim 1, wherein
  - the storage section and the abnormality determining section are provided in the on-vehicle unit.
3. A vehicle monitoring system according to claim 1, wherein
  - the storage section and the abnormality determining section are provided in the data server.
4. A vehicle monitoring system according to claim 1 further comprising:

a portable communicator for communicating with the data server, wherein the server communicator sends the abnormality informing signal output from the abnormality determining section, to the portable communicator.

5. A vehicle monitoring system according to claim 3 or 4, wherein in response to a data request signal from the portable communicator to request sending of the vehicle condition data, the server communicator or the on-vehicle communicator sends the vehicle condition data from the storage section to the portable communicator.

6. A vehicle monitoring system according to claim 3 or 4, further comprising:  
a driver for driving a part of the vehicle, wherein  
the portable communicator sends a settling command signal to settle the abnormality to the driver, and  
the driver drives the part of the vehicle based on the sent settling command signal.

7. A vehicle monitoring system according to claim 6, further comprising:  
a setting section for setting a command to settle the abnormality, in advance,  
wherein  
the setting section sends a settling command signal corresponding to the abnormality informing signal sent from the abnormality determining section, through the server communicator to the on-vehicle communicator.

8. A vehicle monitoring system comprising:  
an on-vehicle unit provided in a vehicle; and

a data server for communicating with the on-vehicle unit, wherein  
the on-vehicle unit comprises:

a vehicle condition monitor for monitoring a condition of the vehicle and  
outputting vehicle condition data; and

an on-vehicle communicator for sending the vehicle condition data output from  
the vehicle condition monitor, to the data server, and

the data server comprises:

a server communicator for receiving the vehicle condition data sent from the  
on-vehicle communicator;

a storage section for storing the vehicle condition data received by the server  
communicator; and

an abnormality determining section for determining whether an abnormality has  
occurred in the vehicle, based on the vehicle condition data stored in the storage section,  
and for outputting an abnormality informing signal when the abnormality has occurred  
in the vehicle.

9. A vehicle monitoring system according to claim 8 further comprising:

a portable communicator for communicating with the data server, wherein

the server communicator sends the abnormality informing signal output from  
the abnormality determining section, to the portable communicator.

10. A vehicle monitoring system according to claim 9, wherein in response to a  
data request signal from the portable communicator to request sending of the vehicle  
condition data, the server communicator sends the vehicle condition data from the  
storage section to the portable communicator.

11. A vehicle monitoring system according to claim 9, further comprising:  
a driver for driving a part of the vehicle, wherein  
the portable communicator sends a settling command signal to settle the abnormality through the server communicator and the on-vehicle communicator to the driver, and  
the driver drives the part of the vehicle based on the sent settling command signal.
12. A vehicle monitoring system according to claim 11, further comprising:  
a setting section for setting a command to settle the abnormality, in advance, wherein  
the setting section sends a settling command signal corresponding to the abnormality informing signal sent from the abnormality determining section, through the server communicator to the on-vehicle communicator.
13. A vehicle monitoring system comprising:  
an on-vehicle unit provided in a vehicle; and  
a data server for communicating with the on-vehicle unit, wherein  
the on-vehicle unit comprises:  
a vehicle condition monitor for monitoring a condition of the vehicle and outputting vehicle condition data; and  
a storage section for storing the vehicle condition data output from the vehicle condition monitor;  
an abnormality determining section for determining whether an abnormality has

occurred in the vehicle, based on the vehicle condition data stored in the storage section, and for outputting an abnormality informing signal when the abnormality has occurred in the vehicle; and

an on-vehicle communicator for sending the abnormality informing signal output from the abnormality determining section to the data server, and

the data server comprises:

a server communicator for receiving the vehicle condition data sent from the on-vehicle communicator.

14. A vehicle monitoring system according to claim 13 further comprising:  
a portable communicator for communicating with the data server, wherein  
the server communicator sends the abnormality informing signal output from the on-vehicle communicator to the portable communicator.

15. A vehicle monitoring system according to claim 14, wherein in response to a data request signal from the portable communicator to request sending of the vehicle condition data, the server communicator sends the data request signal to the on-vehicle communicator,

the on-vehicle communicator sends the vehicle condition data from the storage section through the server communicator to the portable communicator in response to the data request signal.

16. A vehicle monitoring system according to claim 14, further comprising:  
a driver for driving a part of the vehicle, wherein  
the portable communicator sends a settling command signal to settle the

abnormality, through the server communicator and the on-vehicle communicator to the driver, and

the driver drives the part of the vehicle based on the sent settling command signal.

17. A vehicle monitoring system according to claim 16, further comprising:

a setting section for setting a command to settle the abnormality, in advance, wherein

the setting section sends a settling command signal corresponding to the abnormality informing signal sent from the abnormality determining section, communicator to the driver.